8.0 SITE CLEANUP ACTION

8.1 SELECTED CLEANUP ACTION

All the five alternatives evaluated in the FS rely on containment measures with Alternative C providing for partial removal of contaminated soils. MTCA recognizes that permanent solutions may not be practicable for all sites but requires that the cleanup action must satisfy the criteria outlined in WAC 173-340-360(5)(d) used to determine whether cleanup is "permanent to the maximum extent practicable". Table 8 shows that in terms of environmental benefit, Alternative C scores the highest. However, Alternative C ranks the lowest in terms of permanence to the maximum extent practicable because it is more difficult to implement and because of the cost. As per WAC 173-340-360(5)(d)(vi), a cleanup action shall not be considered practicable if the incremental cost of the cleanup action is substantial and disproportionate to the incremental degree of protection it would achieve over a lower preference cleanup action. Table 10 shows the high cost of Alternative C over the other alternatives. Alternatives B and E score the highest in terms of permanence to the maximum extent practicable as shown in Table 8. Alternative E, which costs less than Alternative B, includes erosion control as a component of the cleanup. Alternative B provides for a low permeability cap and a stormwater management that would reduce the leaching of contaminants to ground water. Because the low permeability cap is not expected to significantly change ground water quality at the Site, Alternative E is preferred over Alternative B.

Ecology's selected cleanup action is Alternative E, plus a stormwater management system at the Site and clean-capping with a grade to prevent direct contact with contaminated soil and to promote stormwater drainage, as determined in the engineering design report. A stormwater management system is necessary because under the current Site conditions, the infiltration of precipitation surface runoff through the dry wells at the Site adds unnecessary loading and has the potential to impact leaching rates. The selected cleanup action shall consist of the following:

- Covering and bringing to grade the ATC area with clean soil or gravel; periodic inspection and maintenance of the soil or gravel cover.

- Continuing the use of the existing fill in the former SGP area to serve as a barrier that prevents direct contact with contaminated soils; periodic inspection and maintenance of this fill material.

- Abandonment of existing dry wells in the SGP area; stormwater management to reroute stormwater to swales outside the area of contamination or to nearby storm sewers.

- Construction of a streambank bioengineering along the contaminant impacted shoreline of the Spokane River.
- Ground water monitoring.
- Institutional controls to prevent exposure to contamination and to protect the remedy.
- Five-year review to ensure that the remedy continues to provide adequate protection of human health and the environment.

8.2 POINTS OF COMPLIANCE

8.2.1 Soil

The point of compliance for Site soils is in the soils throughout the Site.

8.2.2 Ground Water

The cleanup action relies on containment measures. All practicable methods of treatment are utilized for the Site. Therefore, a conditional point of compliance for ground water which shall be as close as practicable to the source of hazardous substances, not to exceed the property boundary shall be used.

8.3 MONITORING

A compliance monitoring plan, prepared in accordance with the requirements of WAC 173-340-410 shall be prepared to address the following objectives:

1. Protection monitoring. Monitoring will be conducted to confirm that human health and the environment are being protected during construction and operation of the cleanup action.

2. Performance monitoring. Monitoring will be conducted to confirm that the cleanup action has attained cleanup standards and other performance standards.

3. Confirmational monitoring. The long-term effectiveness of the cleanup action will be confirmed through continued monitoring.

8.4 INSTITUTIONAL CONTROLS

Institutional controls are measures undertaken to limit or prohibit activities that may interfere with the integrity of the cleanup action or result in exposure to hazardous substances at the Site.

Institutional controls are a vital element of this cleanup action plan to ensure protection of human health and the environment. Institutional controls are required because the selected remedy involves containment and a conditional point of compliance is used for ground water. Institutional controls include: physical measures, such as fences and signs, to limit activities that may interfere with the cleanup action or result in exposure to hazardous substances at the Site; and, legal and administrative mechanisms to limit site use (i.e. restricting use of property for industrials or commercial purposes, restricting disturbance of a cap or use of ground water) and/or to ensure that any physical measures are maintained over time (i.e., inspection and repair of monitoring wells, treatment systems, caps or ground water barrier systems). Appropriate institutional controls would be described in a restrictive covenant on the property that shall be executed and recorded with the register of deeds for the county. The Restrictive Covenant shall run with the land, and be binding on the owner's successors and assigns.

Based on the requirements under WAC 173-340-440(5), the restrictive covenant shall prohibit any activity on the property that may interfere with the integrity of the cleanup action and shall continue protection of human health and the environment. If activities on the property are proposed, they must be approved by Ecology. A draft Restrictive Covenant is included as Appendix A.

8.5 PERMIT REQUIREMENTS

RCW 70.105D.090 exempts remedial actions at a facility conducted under a consent decree, order, or agreed order from the procedural requirements of chapters 70.94, 70.95, 70.105, 75.20, 90.48 and 90.58 RCW and of any laws requiring or authorizing local government permits or approvals. However, the Department shall ensure compliance with the substantive provisions of such permits or approvals.